Influenza Fact Sheet

What is Influenza (the flu)?

Influenza, or the flu, is a highly contagious viral infection of the nose, throat and lungs. It is one of the most severe illnesses of the winter season (approximately December to March) in which 10 to 20 percent of U.S. residents are affected each year.



Isn't the Flu Just a Really Bad Cold?

No. More than 200 different viruses, known as rhinoviruses cause colds. There are several strains of influenza (flu) virus. Colds and flu may have similar symptoms, but the flu can cause serious complications for some people. The term "stomach flu" is often used to describe illnesses associated with nausea, vomiting or diarrhea. Many different viruses, bacteria, or even parasites can cause these symptoms. While vomiting, diarrhea, and being "sick to your stomach" can sometimes be related to the flu, these problems are rarely the main symptoms of influenza. The flu is a respiratory disease, not a stomach or intestinal disease.

Is the Flu Really That Serious?

Yes. Influenza can spread quickly in a community, especially if it is a strain that is new to the area. This spread of infection can result in localized epidemics. People may be immune to some strains of the disease either because they have had that strain of influenza in the past or because they have recently received influenza vaccine. However, depending on how much the virus has changed, people may have some, little, or no immunity to the new strain. Small changes can result in localized epidemics. When a new, highly contagious strain of influenza virus emerges, an influenza pandemic can occur and affect populations around the world.

Each year, an average of 114,000 people require hospitalization, and 36,000 people die as a result of influenza. History has shown that influenza pandemics are very serious. The worst natural disaster in modern times was the infamous "Spanish flu" of 1918, which caused 20 million deaths worldwide and over 500,000 deaths in the United States. More recently, the Asian influenza pandemic of 1957 and the Hong Kong influenza pandemic of 1968 were associated with high rates of illness and social disruption.

How Do People Get the Flu?

The flu is spread when a person who has the flu coughs, sneezes or speaks and sends the flu virus into the air and another person inhales these very small virus

particles. The virus enters through the nose or mouth and into the throat and lungs and begins to multiply. Influenza can also be spread when a person touches the surface that has the flu virus on it, such as a door handle, and then touches his or her nose or mouth.



A person can spread the flu before he or she feels sick. Adults can continue to pass the flu virus to others for another three to seven days after symptoms start. Children can pass the virus for longer than seven days. Some persons can be infected with the flu virus but have few symptoms. During this time, those persons can still spread the virus to others.

What are the Symptoms?



If you have a sudden onset of body aches, fever, and respiratory symptoms during the months of December to March, your respiratory illness may be the flu. However, flu can be caught at other times of the year, but it is not as common. Other respiratory illnesses can cause similar symptoms to the flu. Common flu symptoms include, but are not limited to:

- Sore throat and nasal congestion (sometimes)
- Muscle aches (sometimes *very* uncomfortable)
- Dry cough
- Headache, dizziness
- Fatigue
- Fever, chills

The time from when a person is exposed to flu virus to when symptoms begin is about four days with an average of two days. Most people who get influenza will recover in one to two weeks, but some people develop life-threatening complications (such as pneumonia) as a result of the flu.

Flu symptoms in school-age children and adolescents are similar to those in adults. Children tend to have higher temperatures than adults, ranging from 103°F to 105°F. Flu in preschool children and infants is harder to distinguish, since its symptoms are so similar to infections caused by other viruses.

Who is At-Risk for Getting the Flu?

Anyone can get the flu (even healthy people), but the disease is more severe for some people than others. Severe problems from influenza can happen at any age, but people 65 years and older, people of any age with chronic medical conditions, and very young children are more likely to have complications from influenza. Pneumonia, bronchitis, and sinus and ear infections are three examples of complications from the flu. In addition, the flu can make chronic health problems such as asthma and chronic congestive heart failure worse. The following groups of people are at increased risk for complications from the flu:

- Persons aged 50 years and older
- Residents of nursing homes and other long-term care facilities.
- Adults and children 6 months of age and older who have chronic heart or lung conditions, including asthma;
- Adults and children 6 months of age and older who need regular medical care or had to be admitted to a hospital because of metabolic diseases (like diabetes), chronic kidney disease, or weakened immune systems (including immune system problems caused by medicine or by infection with HIV/AIDS).
- Children and teenagers (aged 6 months to 18 years) who are on longterm aspirin therapy.
- Women who will be more than 3 months pregnant (>14 weeks gestation) during the flu season.

While death from influenza itself is rare, it can aggravate underlying medical conditions, such as heart or lung disease and other chronic health problems common among people over the age of 65. According to the Centers of Disease Control and Prevention (CDC), forty-three percent of all hospitalizations for influenza occur among persons age 65 and older. In the United States, people age 65 and older account for about 90 percent of influenza-associated deaths.



How Can the Flu be prevented?

An annual flu shot can help prevent much of the illness and death caused by influenza. A flu shot can be given to most people over 6 months of age. The flu shot decreases both the chances of contracting flu and the severity of the virus, thus decreasing hospitalizations by 50% to 60%, and decreasing deaths by about 80% among older persons.

A flu vaccine helps the body produce antibodies that help destroy flu viruses. Flu viruses constantly change so different virus strains must be incorporated in vaccines from one year to the next. Therefore, yearly flu shots are necessary.

According to the CDC, the success of flu vaccines varies from one person to another. In healthy young adults, the vaccines are 70 to 90 percent effective in preventing the disease. In the elderly and people with certain chronic medical conditions, the vaccines are less effective in preventing illness but help reduce the severity of an infection and possibility of major complications.

Who should get vaccinated?

- Persons who are in groups at high risk (see above).
- Physicians, nurses and other personnel in both hospital and out-patientcare settings, as well as paramedics and emergency medical technicians;
- Employees of nursing homes and chronic-care facilities who have contact with patients or residents;
- Employees of assisted living and other residences for persons in groups at high risk;
- Persons who provide home care to persons in groups at high risk, and
- Household contacts, including children ages ≥6 months (see below) of persons in groups at high risk.

Children

Children ages 6-23 months are at substantial increased risk for influenza-related hospitalization. The American Academy of Pediatrics, and the American Academy of Family Physicians continue to encourage vaccination of children in this age group.

Currently the FDA has not approved influenza vaccine for children less than 6 months of age. However, the probability of influenza among these children can be greatly reduced when other household contacts, including children \geq 6 months of age are vaccinated.

Travel

People who anticipate traveling abroad--especially traveling to tropical regions, traveling with organized tourist groups at any time of the year, or traveling to the Southern Hemisphere during April to September should consult their health care provider about getting a flu vaccine before traveling. For more information visit: www.cdc.gov/travel/feb99.htm.

You should NOT get the flu shot if...

- you are allergic to eggs or any component of the vaccine. The viral material in flu vaccines is grown in eggs.
- you have a history of Guillain-Barre Syndrome.

• you have an acute illness and a fever. You should not get a flu shot until you are feeling better.

When is the Best Time of Year To Get The Flu Vaccine?

The best time to get flu shots in the United States is between October 1st and mid-November.

Is the Flu Vaccine Safe?

Yes. The vaccine is very safe and generally has few side effects. As with any medication, there are very small risks that could occur after getting a vaccine. However, the potential risks associated with influenza illness are much greater than the potential risks associated with the influenza vaccine.

You cannot get influenza from the vaccine. Only about 5 to 10 percent of people who receive a flu vaccine experience mild, temporary side effects. The most common symptom is soreness at the injection site. Young children who have not previously been exposed to the influenza virus are most likely to have side effects. Other possible side effects include headache and low-grade fever for about a day after receiving the vaccination.

The influenza vaccine will not protect you against other respiratory infections, such as colds and bronchitis, commonly referred to as "the flu."

What about Flu Shots and Pregnancy or Breastfeeding Mothers?

Pregnancy can increase the risk for complications from the flu. The CDC recommends that women who are beyond the first 3 months of pregnancy during the flu season should get a flu shot.

Breastfeeding mothers can receive a flu shot without causing harm to the mother or the child. In addition, infants over six months of age can get a flu shot.

Where Can I Get a Flu Vaccine?

Flu shots are readily available throughout the community. Influenza vaccines are fully paid for by Medicare Part B if the health care provider accepts the Medicare-approved payment amount. Contact your health care provider for more information.

Can Antiviral Drugs Cure the Flu?

Four antiviral drugs, amantadine (Symmetrel®), rimantadine (Flumadine®), zanamivir (Relenza®), and oseltamivir (Tamiflu®) are approved for treating the flu and can reduce the duration of the disease, but cannot cure it outright. If one of these antiviral drugs is taken within 2 days of when the symptoms begin, it can reduce the duration of the flu by about one day. These drugs are not effective against other viruses or bacteria that can cause symptoms similar to influenza. In addition, the drugs are not effective for treating bacterial infections that can occur as a result of complications from influenza.

The four drugs that are available by prescription have differing side effects. Consult your health care provider for more information.



If I get the Flu, How Should it be Treated?

Drink plenty of non-alcoholic, decaffeinated fluids to stay hydrated, and to keep secretions thinned. If you have a headache or cough, or are congested, a hot shower or vaporizer can help you feel better and breathe easier. Take acetaminophen or ibuprofen to relieve headache,

muscle aches and fever, and get plenty of rest. Discuss the use of decongestants or other over-the-counter medications with your health care provider or pharmacist, as some medications may interact with each other.

Should Aspirin be Given to Children and Teens Who Have Flulike Symptoms?

No. Aspirin should not be used in children under eighteen years old because it may play a role in causing Reye Syndrome (www.nlm.nih.gov/medlineplus/reyesyndrome.html), a rare but severe liver and central nervous system condition.

When Should The Doctor Be Called?

Antibiotics are not effective against influenza. In most healthy people, influenza will go away in about 7 to 10 days. People at high risk of complications are encouraged to contact their health care provider within 48 hours of their first



symptoms to find out whether they need medication to shorten their illness. They also should call the doctor to receive medication if they have been exposed to the flu.

Is Anyone Tracking Influenza?

Yes. The California Influenza Surveillance Project (CISP) is a collaborative effort between the California Department of Health Services, Division of Communicable Disease Control, the Centers for Disease Control and Prevention (CDC) and Kaiser Permanente. The project obtains and analyzes hospital, pharmacy and laboratory data in an effort to determine the timing and impact of influenza activity and to determine how well circulating strains of the virus match those used in the current influenza vaccines.

Active surveillance during the influenza season includes data on Kaiser Permanente inpatient admission diagnosis, Kaiser outpatient pharmacy prescriptions for antiviral medication, outpatient influenza-like illnesses from sentinel physicians, and respiratory virus isolations and detections. For more information about the CISP visit: www.dhs.ca.gov/dcdc/vrdl/html/fluintro.htm.

The World Heath Organization (WHO) Global Influenza Surveillance Network, established in 1952, is comprised of 4 WHO Collaborating Centers (WHO CCs) and 112 institutions in 83 countries, which are recognized by WHO as WHO National Influenza Centers (NICs). NICs collect specimens in their country; and perform primary tests. They ship newly isolated strains to WHO CCs for analysis, the result of which forms the basis for WHO recommendations on the composition of influenza vaccine for the Northern and Southern Hemisphere each year.

The WHO Influenza Surveillance Network serves also as a global alert mechanism for the emergence of influenza viruses with pandemic potential.

If you are interested in visiting websites that track influenza throughout the United States visit: www.fluwatch.com/index2.html. To track influenza internationally visit: www.who.int/csr/disease/influenza/influenzaanetwork/en/.

Where to Turn for More Information

CDC Influenza Home Page (www.cdc.gov/ncidod/diseases/flu/fluvirus.htm

WHO Influenza Home Page (www.who.int/csr/disease/influenza/en/)

The California Viral and Rickettsial Disease Laboratory Branch Home Page (www.dhs.cahwnet.gov/ps/dcdc/VRDL/html/fluintro.htm)